Recd March 13th Cambridge Feby 29. 1848.
Ansd March 23

My Dear Doctor

I thought I should be hearing from you soon, and delayed writing to you partly on that account. Yours of the 15th came this morning, and I write back immediately, on account of the importance of what you say about Fendler, although my arm is so ~~tired~~ tired in writing copy for the Illustrations (which I hope to send some copies of it in sheets & to Paris by a private hand on the 24th prox. — and therefore am driving hard) that I cannot write very legibly.

I shall write to Washington for early copies of your appendix to Wislizenus' Report, that I may see what you have done. The information that W. gives about the physical character of the country will be interesting and very important to us. I will try at the seed Stores for cactaceous seeds for you, and ask Mr. Lowell, whose gardener should be able to secure some of those you need.

Advertise and enquire. Surely you must find those missing boxes of Fendler's, which are right under your nose at St. Louis. — Though the cacti be dead & gone, the dried plants will eke out Fendler's sets, and therefore his earnings.

Olney, at Providence, subscribes for a set. S. T. Carey (brother of J. C.) wants his without the mosses. —

I hope the box you speak of will come soon, for I want to take up and publish Fendler's plants now very soon. — Describe yourself the families you choose, and leave the rest to me. (Why does F. keep a set, if he goes back?) Now for Fendler himself.

He ought to go back, and without delay. He has gained much ~~useful~~ experience, and will now work to greater advantage. He makes unrivalled specimens, and with your farther instructions will collect so as to make more equable sets. If he will stay and bide his time he can get on to the mountains, and must try the higher ones, especially those near Taos. I like your plans, and will immediately lay the whole before Mr. Lowell. I hope he will engage in it, but, besides what you are aware of, he has already advanced so much to help me along with Illustr. Genera, &c. — that I fear he will think there is no end to the wants of botanists. But if Fendler engages in this enterprize with spirit, it must be done, somehow. (Let him collect land-shells too, &c.) —

But it will be best not to give him his whole outfit at once, not only to save such heavy advances, but because at Santa Fe he can sell his drafts on St. Louis at a good premium, no doubt. — Say he has $250 outfit, and a credit at St. Louis, so that he can draw $125 every three months, and meanwhile his collections will come to hand to encourage us. Let him stay 2 years, and if he is energetic he will reap a fine harvest for botany, and accumulate a pretty little sum for himself, and have learned a profession, for so that of a collector now is. Drummond made money, quite largely.

2nd. To provide against risk, I propose that we take a share of the ultimate responsibility in case of —

MISSOU
GEORG

Fendler's death. — Again Mr. Lowell must have the 1st set, you mention, instead of Hooker, if he wants it.

I like the plans you suggest about mentioning all the plants collected, whether ~~dist enough~~ enough to distribute or not. It is not worth while to be very particular about the numbers all running in systematic order.

I had rather Fendler would go North & West, than South of St. Fe. New Spain & Rky Mountain Botany is far more interesting to us than Mexican. —

Missouri Botanical Garden
George Engelmann Papers

I have the 8th fasc. of Ledeb. Fl. Rossica. Cuscutineae are skipped because you have the collection for examination!

How do you send the box? — overland, or by N. Orleans? — For the latter I will ask Mr. Lowell to give you the address of his agent there, who will receive & promptly ship to Boston our things. Shall I send there a copy of my Manual, now out, and also the Genera Illustr. now fast printing?

Yours truly
A. Gray

Dr. George Engelmann
St. Louis
Missouri

Rec^d March 16th 1848
Ans March 23

My dear Sir,

I return Dr Engelmann's letter & send you one from Boott received today.

The Fendler collection are very interesting & remarkably fine specimens—

He must go out again, decidedly; & I will contribute $200. & as much more next year if wanted—

Yrs truly
J A Lowell

Pemb. Sq. 4 Mar. 1848

Dr Gray

---

Cambridge March 6th 1848

Dear E. Here is Mr. Lowells reply; brief. but to the point. This, with what you can perhaps realize at once in the west at once from subscribers (Short? & Sullivant.— the latter will surely advance 75 more, now, if you ask him) will make a good immediate outfit.— Meanwhile the proceeds from sales will form a further fund for him to draw upon ~~at~~ from St. Fe. —at St. Louis, as he needs during the summer. and then we will make his next summer's collections, with Mr. Lowell's next $200, support him

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MISSOURI
BOTANICAL
GARDEN

as long as he will stay.— till he can come home with a large harvest! So send him off at once. (I will also pay for seeds— when I get them. but I have no right to advance. For Mr. Lowell's $200. you may draw on him or me, as you choose! or we will remit at once, according to your direction.

Fielding writes from England, for as large a set as he can have (He also asks for ~~[illegible]~~ new coll. of Lindheimer).

I suppose Fielding— also, others, would now freely advance— after getting their sets of present coll. if we would put them cheaper to such as run such risks. How would this do.

Send ~~[illegible]~~ Lindheimer's plants as soon as you can, for I want to work up those soon. Work up what families you like. Leave the rest to me.—

D.V. I am to be married on the 4th May!

Yours ever

A. Gray

Dr. George Engelmann

St. Louis

Missouri

CAMBRIDGE MAY 9

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Rec^d March 27
Ans. April 3d

Cambridge 15th March.

Dear E.

I hope you have mine of the — telling you that Lowell will advance $200 for sending back Fendler.

I saw Nuttall the day before he sailed for Liverpool. — I asked him to see Fielding who lives not far from him in Lancashire & ask him if he would advance — telling him that I should recommend to ~~Fendler & myself~~ yourself to place those who advanced money at advantage somewhat proportionate to the risk they run — in respect to price as well as early chance at collections. Nuttall said he had no doubt Fielding would advance — (I wrote F. to answer his application for a set of Fendler's plants — which he made immediately on seeing the notice in Hook. Jour. Botany — told him he should have as good an one as possible now — and a good chance hereafter if Fendler went back — Better than all, Mr. Nuttall offered to advance $100 for the present purpose and has sent to me an order on his agent at Philada — for that sum payable in May next. Now all is right. Send him off. — As soon as ~~the~~ sets come, I will ask Greene also to advance another $50 — & forward to you. With his nice specimens we can get subscribers enough. +

Have yours of the 27 Feb. — In what way did you send the box.

I will send on the package for Bremen, as you direct. Give me the name of a good commercial agent there — who would receive & forward packages — for we can send into Germany most rapidly that way now, by N. Y. Steamers.

I'll look after Fendler's Compositae & all that.

I am anxious to see Wislizenus's Report.

Torrey has engraved — but not yet published his G. Fremontii — has probably forgotten it is not published.

I wish I could get you seeds of cactis — doubt if I can just now. But as parcels of seeds come in I will save of such for you.

I have sent a parcel for you containing my Manual (a present, of course) to New Orleans, to Mr. Lowell's agent there (free of expense) — Mr. Thos. P. Bancroft — ~~He is~~ His partner is J. P. Labouisse. They are great cotton buyers — Every business man knows just where they are. I send up Ask any body to get the parcel to you at St. Louis.

Ever yours

A. Gray

Thos P. Bancroft in N Orleans till 15–20 May
J. P. Labouisse probably all Summer

TANICAL GARDEN
LMANN PAPERS

X

Dr. Geo. Engelmann

St. Louis

Missouri

CAMBRIDGE
MAR
16
MS.

Rec^d Ap 25
Ans Ap 29

Cambridge, April. 17. 1848.

My Dear Doctor.

Being down at the village this morning — & finding your letter of the 3^d inst at the P. O. I sit down here to write before going home. — I had your letter of March 23^d — and was about to answer it. — — was disappointed that Fendler would not pack up at once and be off again — hope he still will, — am sure we can support him well there — and that he will make a very fine collection next time. — I hope, by the time you get this he will conclude to go. —

I did not exactly understand how the 3 boxes are sent to me — by Express? or to await the opening of the Canal — or by Rail-road. — Was not by sea via N. Orleans prompter & safer. — And why not send the seeds — and my set of Fendler's plants by Express. — I finish my Genera Illustr. early this week, and could begin to study them soon. — even before I am married, which will be (D.V.) on the

4th of May. × Mr. Olney wants a set of Fendlers — Mr. Lowell more than one — or at least for the whole amount of his subscription & 2 or three people I know will want them. — also Bentham I think. —

You will have received a letter from Hooker, asking for a set for Dr. Lehmann — who is very anxious for a full set.

I have told you of Fielding also. —

I shall be glad to get the new Lindheimer colls —

MISSOURI BOTANICAL GAR
GEORGE ENGELMANN PAPE

× As to Gregg — I will write Marcy. — but he has his hands so full he will hardly notice a letter merely. — You ask Benton to apply to him, that will secure it. —

Nuttall has published a synopsis of Gambel's plants in the Proceedings of Academy of Natural Sciences. — Philada. it should be sent to you. But they are to appear in detail in the Journal of the Academy

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BOTANICAL
GARDEN

Mr Lowell has subscribed for a set of his Plants — so we shall have the means of comparison. —

You should have got a copy of my Manual I sent to N. Orleans in this. I have done nothing with the Ferns. — I am anxious for the publication of Kunze's paper on Filices — Pray translate it and send to Silliman at once —

As to your Monogr. of Cuscutineae — when done send it to our American Academy. We will print it at once — very nicely & give you 150 copies extra. — and engrave all your drawings. I care not how many. 20 plates 4o if you wish. —

How soon will the rest of my set of Fendler's plants be here?

Tell Fendler he is a fool, if he does not go ~~back~~ back to S. Fe. — —

We will get Government protection for him, & and office, if ~~he~~ wishes to stay there. Yours

A. Gray

GARDEN PAPERS

Dr. Geo. Engelmann
St. Louis.
Missouri.

The 2d species of Frasera is probably all nonsense — However send me a specimen of your Western Plant, & I will compare with Southern, & Ohio pl. — A.G.

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they are

to Lowell the

Dear E. The "Vesicaria umbellata" Pl. Lindh. (by which I have illustrated the genus in Genera (M.S.) elongates its racemes a good deal in my ~~flower~~ cultivated specimens — especially when the lower flowers fail to fruit: As this makes the name less appropriate, allow me to call it V. Engelmannii

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BOTANICA
GARDEN

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May 15. 1848.

Recd May 26th
Ans June 1st

Dear E.

I have received the copies of your appx. to Wislizenus, & lately that Report itself with a copy for Torrey also — which I have forwarded to him yesterday.

The boxes with Fendler's Plants &c — have not yet come. — I begin to be much anxious about them. Pray enquire after them at your end, and trace them as far as you can. I could now go at Fendler's coll. well.

My Genera vol. 1. is out. I put up a copy — (in paper cover) & send by mail to you to-day, if, on enquiry I find the postage will not be too high — It is a copy which you owe to Mr. Lowell, who sends it, in exchange for plants you sent him. &c—

I want the seeds, too, which are in those boxes— It is a pity to get them late, so that they are arrested by cold before flowering & fruiting.

You should send to Lowell the shorter sets of ndlers plants, enough to make up his $150. — He will them to exchange with, abroad.

Yours hastily &
truly
A. Gray.

P. S. When your MSS. & Drawings are y let me have your Memoir on Cuscutineae for lication in Amer. Acad. Memoirs 4to. We will publish as many tes as you wish. —
A.G.

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GARDEN

Recommend by Genera to Braun —
and ask him to see if he can cause some copies to be sold

A.G.

I wish I had your Compositae of Wislizenus.
I think of writing a little paper on New Spain
Compositae — as an appx. to Fendler's —

MISSOURI BOTANICAL
GEORGE ENGELMANN PAPERS

April 17th 1848

Dear E.

I wrote yesterday, in reply to your last.—

I now glance again over yours of the 23d March—

I daily hope to hear that Wislizenus' Report is out at Washington.—

Nuttall looked over the Fendler set you sent me— and says there is not one same as ~~[illegible]~~ Gambel's— in fact Gambel lost most of his St. Fe. collection.—

"Aster squamosus. Walt. = A. squarrosus, evidently.— but I knew it not from Texas.—

I write the preface to the 1st vol. of Genera Illustrata, this evening— The next if strong enough— thing to print is Plantae Fendlerianae— ~~nat~~. — Also the Compositae & Gregg's & other collections from New Spain etc.— sent me, or lent by Torrey— Many look new, & curious.— Many thanks for your congratulations on my approaching marriage. I shall work to all the more advantage after all gets settled here, —

Yours ever,

A. Gray

Rec^d June 3^d
Ans^d June 10^th

Cambridge 25^th May. 1848

Dear Doctor

Yesterday I got yours of the 14^th inst. The last before was of April 19. — I reply hastily. — First of all, & what I am most concerned about, that the boxes sent via Buffalo have not come! — I have kept up repeated enquiries about them at the depot — thus far in vain. —

If Fendler is intelligent & trusty, as I suppose he is, I presume some clerkship or other office might be got for him at Santa Fe.

As soon as the packages come I can collect proceeds for him (the delay by your mode of sending is very bad for him) But I cannot advance at present, being much in debt & trouble with the Genera — nor can I now ask Mr. Lowell further. If he goes to Santa Fe he can get $300 on your draft.

I have Wislizenus Report, but have not found time to look it over.

I shall see Mr. Lowell tomorrow, & will ask, but I think he should have one of the other (smaller) sets if he wants it. I will enquire about it I think he will not wish to have any money refunded, however. —

Many thanks for your kind good wishes.—
I was married on the 4th inst

In greatest haste

Yours ever

A. Gray

X

Dr Geo. Engelmann

St. Louis

Missouri

CAMBRIDGE MS.
OCT
2

X

Dr Geo. Engelmann
St. Louis
Missouri

Rec: June 14th

Cambridge. June 5. 1848.

Dear Engelmann

I have only a moment to say that the boxes from you (3 boxes) have just come – in good condition – just as I was running on to New York – to-day. – I take the seeds for Hooker & send by Steamer from New York wh. goes on Wednesday. –

Yours ever

A. Gray

Very pleasant to write on this paper much to be preferred to the smooth paper which is to got here no blotting every stroke of the pen tells

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GARDEN

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Rec June 2[illegible]th
Ans July 26

Cambridge June 13. 1848.

My Dear Doctor

Returning here this morning, I found the two great boxes of Fendler, sent to Mr. Lowell. — I have just unpacked them, — in fine order apparently, — but just too late to send by Boston Steamer, of to-morrow — But I will send them by the one next week, from New York. — In the sets I notice one mistake, viz. a very good set put up for John Carey, now he has all along said he was too poor to subscribe for these, but his brother wanted a good set. — So I shall put on S. T. C. the set you have marked for John, and leave that for S. T. C. to dispose of.

Again, did Oakes subscribe? I had forgotten; I will tell him a set has come for him any how. —

I'll try to see Mr Lowell tomorrow, and see what he will do. — & see what the two large boxes cost. ~~the~~ my 3 smaller ones cost $5.67.

I must send you another copy of Manual by mail, if that to N. Ol. has ~~does~~ not come by the next letter you write me.

I do want Wislizenus Compositae
& all Greggs — that is surely all of the
1st package — for all those forwarded long
ago to me by Mail, never came to hand.
(His 2nd coll. came to Dr. Torrey thro. Short.—
who has divided with me (or will) & has sent
me the Compositae — many & curious —
I am going to study all with those
from Fendler — & if I find many the same or
similar forms — I want to touch up all these
Compositae of New Mexico &c — when I get about it
therefore pray send on your Compositae of those
regions by Express.

I think I wrote since that the MS. from
Kunze's Ferns came safely, and is printed off
in Silliman — I added only a note or two —
no time.

The Cacti from the box you sent were part dead,
but part alive.

Thanks for what you say of Genera —
I shall send a lot of copies to Rödiger at
Hamburgh soon as I hear the blockade is
over, to supply the booksellers who will have
it.

Cactus seeds (2 sp.) came in letter &
are sown  I will see Mr. Lowell to-morrow.
A. Gray.

P. S. I saw Mr. Lowell — but in haste — he leaves to us. but I infer would like to have his remittance back tho' he will wait as long as you please: I think we will keep for him one additional pretty good set. — that addressed to S. T. Carey, for instance — as I shall send that directed to J. Carey to him. —

Send right away the MSS. of any families you choose to elaborate of Fendlers. I will do the rest as well as I can — & soon.

Tuckerman — who is a rather troublesome customer — wishes not to pay for his set until Sept. — I can then pass it over to Mr. Lowell.

Yours ever

A. Gray

P. S. I like the looks of the Mistizanias paper well, but have had no time to examine it. —

A. Gr.

X

CAMBRIDGE MS.

Dr. Geo. Engelmann
St. Louis
Missouri

Dear Doctor

Enlighten me as to

No 11 (distrib. 13) of Fendler.

It is neither in my set nor in that parcel you sent to be returned. — It is the 1st after Delphinium azureum.

A. Gr.

Help me about — No. 23 (distrib. 38, 39.) I have only a branch with ripe siliques, no leaves at all. — a spent flower at the apex, like Streptanthus, calyx rose-color. Have you foliage to enable me to characterize it. — Cotyledons are accumbent.

~~So of No. $\overset{\text{red.}}{28}$ ($\overset{\text{parent}}{45.}$) (Cardamine cordifolia n. sp.) In the sets they are distributed as 28. — If this is so all through I need not cite the parent numbers in my Enumeration.~~

~~From what I see, I suppose I need not cite the parent numbers at all.~~

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

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Rec'd July 23d
Ans July 26

July 13 – 1848

Dear Engelmann –

I herewith remit $78. – in a check.

I have waited to hear from S. T. Carey (Has he not remitted to you direct?) Cleaveland & Baker – who do not write or remit. – Tuckerman – will not pay till Sept. – So my present remittance consists merely of – Olney — $42.20
The set addressed to S. T. Carey (I gave him that marked John Carey, a larger one), which I take myself & give a part to Dr. Torrey — 26.00
For seeds from Santa Fe – from Garden — 10.00
$78.20

I go on a journey now for 12 days – will write on my return & hope to make further remittance then.

I am getting on well in studying the Santa Fe Plants. – will send you results soon. –

Charge to Mr. Lowell, on your own account with him – the value of the Lindheimer & Wisl. seeds. –

In greatest haste –
Dr. Torrey having been with me & is now – Yours truly

A. Gray

Zuccarini is dead & Kunth seriously ill.

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MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Rec'd Aug 12th
Ans Aug 14

Cambridge. Aug. 2d 1848.

Dear Engelmann —

Trusting you have my favor of July 13d with enclosed check of $78.00 — I would inform you that I have been away from home till now.

Returning I have only, in addition the proceeds from S. T. Carey's set of Fendler's Plants, viz. $38.00, which I herewith enclose a St. Louis check to your order — The set was $38.60 — but 62 cts has been deducted for John Carey who paid that sum for you he says. —

From Cleaveland I hope soon to collect $25.60 —

From Tuckerman in Sept. — 10. —

Oakes' set I must get back. It is sad to tell you that the poor man — who has been lately much distressed about the state of his pecuniary affairs — as I now find — on Monday destroyed himself by drowning!

There is some fear that Sprague & I lose by him about $200. —

I now go at the Fendler collection again, with zeal. —

In haste Yours ever

A. Gray

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GEORGE ENGELMANN PAPERS

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Recd Sept. 14th  Ans Sept 18

Engelmann

Send me specimens of Sida hispida. fr. St. Louis. I have mislaid some old notes of yours on it. — It is not a Sida.

I want to figure Guaiacum angustifolium &c in Genera right away. — The spec. Lindh. Tex. is in immature fruit only. — Will you not send me in a letter a flower bud — some expanded flowers — & if you have it a ripe fruit or a seed.

Malvaceae

Cambridge 6. Sept. 1848.

Dear Engelmann:

I have unreplied ~~to~~ your favors from July 26 to Aug. 25. — I send a short reply today.

You will know that I do not overlook your plates, notes when I do not speak of them — for want of time.

— Torrey is himself far from pleased with the plates of Emory's Report — they were not drawn by a botanist. — I have not seen that Report yet. — If you get a duplicate send me one.

— I noticed the germination of the ~~[illegible]~~ Ipomoea leptophylla as you delineate.

— The gland was accidentally left out in the plate of Cristatella — but I had marked it to be put on in the rest of the ed. when struck off.

Bolivaria did not come up with me.

— The box by Express came last Saturday — cost $5.00. —

I went yesterday to Boston to see Mr. [illegible] but did not find him. — I have no doubt however that he will take the sets of Fendl. Pl. — you have sent. I will let you know —

I charge $3.00 of the freight of said box to account of Fendler Plants. — you should charge it against Lowell (if he takes them, which he will, I'm sure) & the $2.00 I assume myself —

I have looked over the parcel of Lit. plants from Germany — packed up again for return to you — & enclose a note on them — Glad to know what some of those names belong to.

I have been long detained over the Malvaceae: I sent to Torrey for Materials — & meanwhile went on with Enum. Fendl. into Leguminosae, & when I got the materials went back to Malvaceae — made a pretty complete overhauling — some new genera — noticing also Gregg's & Texan plants when they fall in my way.

I will send you a list of my determinations ere long. & a proof when I begin to print. — It takes a deal of time to make all these investigations. — The families you study I will print from your Mss. Pray write only on one side of the paper, — that I may cut it up, if need be, to insert any thing, or correct any unidiomatic English. — tho' your English is generally quite precise.

The Malva — Fendl. is M. [illegible] (also M. obtusa, Torr. olim

— I cannot separate Malvastrum coccineum (Sida Ph.) or from the M. dissectum — except as a var. —

I now see that your Dipteracanthus micranthus makes large flowers early in the season.

I wish you would take the Solaneae

Vernonia Arkansana is now flowering in the Garden — hardy — It looks truly distinct. —

The Talinum 77 & 78, Fendl. = T. parviflorum, Nutt.
From Texas seeds I have Talinum apparently T. reflexum, Cav. &c.

Thanks for all your notes on my Manual. I am glad it bears your sharp eye so well. Done in great haste — amid all sorts of bother & only intended to serve a temporary purpose, you must not expect it to be very perfect. — I note all your mem. for another edition — Go on with them — & I will use them hereafter. —

Amaranthus tamariscinus I have now in flower — from Wisl. or Fendl. seeds. —

Send me a true Polygonum lapathifolium. — Your memos on that genus will be useful when the species are studied — I have but slightly studied them. So of Euphorbia —
I must look at the Androcera.

---

As to Curator I had sent to Wright in Texas & offered it to him. — But just before my letter could reach him, I got one saying he was going to be with Capt. Veatch, on the Rio ~~Grande~~ del Norte till Oct. — I fear my letter has not been forwarded to him, but when ~~it~~ he gets it I have very little doubt he will accept my proposition, & it is only in case he declines that I could engage Fendler. For if I should & then Wright should come on, I should be in a fix, — So Fendler should not depend on it at all. But if I hear from W. that he declines I should like to take F. — I thought I should have heard from W. before this.

As to Expl: Exped. Plants I shall do little at them till I get present things off my hands. I took them with the hope of putting out many families into the hands of others. Will you not take some? — The Urticaceæ & com- if there are any to speak of — & bractæ — Will you not take Euphorbiaceæ?

In haste! Yours truly

A Gray

Engelmann.
Recd. Sept 25
Ans. Oct 6

Cambridge. 12th Sept. 1848.

Dear Doctor,

I think I asked you for flowers & fruit of Guaicum angustifolium in my last letter — that I might figure it for the Genera — If you can please send in a letter.

Yesterday I had a letter, dated July 21, from Mr. Wright now on the Rio Grande with Capt. Veatch: — He had not yet got mine from Austin: but in this he makes a proposition which makes it sure that he will come on here in the autumn, & act as my curator for a while, as I offered him in June. — After spending some time ~~here and~~ here, and learning much, he is favorably disposed to go to Santa Fe to explore — if we can send him.

It is now so certain that he will accept my offer that it is clear I cannot have Fendler now. I am still anxious to serve him any way I can.

I have, raised from seed of Wright, Texas, a new genus of Malvaceae I have never seen yet from elsewhere. Small yellow flowers 3 or 5 in each involucre like the outer calyx of Malope, & the carpels distinct.

P.S. — I mistook carpels: It is a Malachra!

The 5-valved thing splitting on the pod of Androcera is the calyx; under that, in the fresh plant, I find nothing but the pericarp. —

Mr. Lowell will take the 6 sets of plants Fendl. you sent.

MISSOURI BOTAN
GARDEN

Let me fill this sheet with some determinations of Fendler's plants. When I begin to print I shall send you a proof of the 1st sheets & wait for your corrections or suggestions.

I believe I have reported up to Cruciferae —

38. Vesicaria alpina. Nutt.
39. V. arctica Hook.? — to be re-examined.
40. V. Fendleri, n. sp.
41. Draba cuneifolia. Nutt.
42. " micrantha.
43. " aurea, Vahl.
44 Thlaspi cochleariforme.
45. Lepidium ruderale
46 " alyssoides n. sp. (also Frem. coll. 2d.)
55. Drymaria sperguloides, n. sp.
56 " tenella, sp. nov.—
60 — " cordata ?
63. Silene Menziesii,
64 " Antirrhina.
65 " Drummondii, var.
66 " Scouleri ??,
67 " stellata.

18. Nasturtium sinuatum, Nutt.
19 " obtusum, Nutt.
20 " palustre — Amer.
21 " sphaerocarpum sp. nov.
30 — too poor to determine.
32 Sisymb. canescens. Nutt.
33–35 Erysimum asperum. 36 Stanleya pinnatifida 31 & 29 Sisymbr. Sophia. —

47. Cristatella Jamesii
48. Polanisia trachysperma.
I have P. uniglandulosa now from Mexico, Cavanilles, like this, but much larger.
49. Cleome integrifolia —
50. Viola cucullata.
51. V. Canadensis.
52 Lechea minor
53 Hypericum Scouleri.
54 Sagina Linnaei.
57. Arenaria Fendleri n. sp.
58 & 62 Stellaria lanuginosa.
59. Moehringia umbrosa.
61. Cerastium nutans.
68. Anychia dichotoma.
69. Paronychia Jamesii
70. " sessiliflora.

22. Streptanthus longifolius. Benth.
23. S. micranthus. sp. nov.
24 S. linearifolius. sp. nov.
25. Arabis hirsuta
26. Turritis glabra
27 T. patula.
28. Cardamine cordifolia.

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72. "Talinum calycinum E." (Please save me a dried specimen.
71. T. parviflorum. Nutt. 73. Portulaca pilosa. 74 "P. oleracea.

75. Malva borealis.
76. 77. Malva (Callirrhoe) involucrata.
78. Sphaeralcea miniata (Malva, Cav.!)
79. Sidalcea Neo-Mexicana. (New genus of several sp. = Sida malvaeflora. Lud
S. Oregana. Nutt. delphinifolia. Californica — diploscypha. —)
80 S. candida. n. sp.
81. 82. Malvastrum (n. g.) coccineum. / I have a long excursus on Malvaceae.
83. Linum perenne. 84. 5. L. Berlandieri. 86. L. rigidum.
87 Erod. cicut.
88. Geranium maculat. v. albiflorum.
89. 90. " pentagynum. E. Why not same?
91. Oxalis Vespertilionis. 92 O. stricta — 93. "Impatiens. pallida
94, 95. Ptelea angustifolia. Benth.
96. R. copallina
97 R. — — — — 98. R. Toxic. 99. R. trilobata. Nutt.
100 Kallstroemia maxima.
101 Acer 3-partitum.
102 Negundo aceroides var.
105. Pachystima (Raf.) (Myrsinites. = Oreophila. Nutt.
106. Ceanothus Fendleri, n. sp.
107. Vitis riparia. Mx. 108 Ampelopsis. 114 Cicer Arietinum
109 Polygala sanguinea. 110. P. alba. Nutt.
111. Vicia truncata. 112. V. americana. 113. V. micrantha.
117 Phaseolus leiospermus
118 Apios tuberosa
119
120 Amphicarpaea monoica
~~121~~
(117-120?) 119?
115. Lathyrus polymorphus. 116. L. linearis.?
121. Glycyrrhiza lepidota
122 Psoralea floribunda. 123. P. argophylla. 124, 125. ?? Amorpha ?? canescens.
126. A. fruticosa var.
127 Dalea alopecuroides. 128. D. lanata. Spreng. 129. D. aurea.
130 D. nana. Torr. ined. also in Tex. L. 131. D. laxiflora. 132. D. formosa.
133. D. Jamesii.
134 Petalostemum villosum. 135. (& 136.) P. candidum. 137. (& 138) P. violaceum
139. " macrostachyum.
140. Trifolium involucratum. Willd.

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141. Melilotus parviflora.
142. Medicago sativa.
143. Hosackia Purshiana.
144 Astragalus or Phaca – no fruit – can't tell.
145. Astrag. Canadensis.
146. A. pachycarpus. (I think) 147. white var. of same.
148. A.?
149. A.? Missouriensis. Nutt. (A. melanocarpus, Richard.! Hooker!)
150. A. Hypoglottis.
151. = ~~149?~~ ?. – Single specimen. fruit only Astrag. – dare not describ
152. A. mollissimus Torr.?
153 A. mollissimus. Torr.
154 Oxytr. Lambertii. var.
155. O. campestris β. speciosa ex Hook.
156. Astrag. Nuttallianus β.
157. Phaca Fendleri. n. M.
158. Not in my set, nor those you lent. What is it. *
159. Phaca triflora, DC. (?) = Pl. Carter. under that name, (no such name!)
160. P. macrocarpa. n. M.
161. P. picta. n. M.
162–5. – Named by you
166. Lupinus leucopsis?
167. var. of 166?
168 L. laxiflorus var.? subglabra, fl. minoribus?
169. L. decumbens. Torr.
170. Thermopsis montana, Nutt.
171. ~~No specimen. What is it?~~ Sophora sericea, Nutt.
172 "brevis"
173. Hoffmanseggia Jamesii
174. "Cassia Chamaecr. 175. C. marilandica"
176. Kentrophyta montana. Nutt.

177. "Schrankia. angust."
178. Desmanthus brachylobus. Benth.
179. D. Jamesii.
180 No specimen.
181 Mimosa borealis, n. sp. What is it.? fruit only!

---

* 158 is not in Lowell's set either. What is it.

Sept. 16. —

Dear Doctor

Please send on your notes on the Cactæ of Fendler soon — & any other families you choose. —

I mean to print as soon as I can. —

Truly thine

A. Gray

I trust you will take the Coniferæ too. — Can I aid you?

X

Dr. Geo. Engelmann

St. Louis

Missouri —

CAMBRIDGE
SEP
16
Ms.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Recd Octob 13
ans Oct 15

1848 Engelm.

183. I have only flowers — some cultivated, I sugg.
Is it not Armeniaca?

---

Do you know any thing of the Loranthaceae
Fendl. no. 283. I suppose is Arceuthobium Oxycedri
Viscum vaginatum Humb. & Bonpl. and a Viscum
No. 281. is Arceuthobium. Have you any staminate
No. 282. Have you any stamens of it, which Fendler says
are on ~~styles~~ 2 or 3 stipes, pistillate
flowers, and it is an Arceuthobium by the anthers.
I hope 281. is one also.—

Cambridge, Oct. 4. 1848.

Dear Engelmann

I have your favor of Sept. 18 to reply to. First let me ask, Did you make any arrangement with Hooker about remitting the proceeds of Fendler's Collection to you.— Having to pay in London, for a set of Hartweg Calif. plants, I drew on Hooker, & put the £10.— & odd, paid only the amount of his own set. A former letter of Hooker's spoke of the sets being put into Heward's hands for distribution & sale, & wishing that poor Fendler should have the cash as fast as possible, I wrote by to-day's steamer to Bott, and sent an order for Heward to pay over to him, deducting his commissions, as fast as collected.—

Poor Oakes' collection is now back [illegible]. I think it probable that I shall make some arrangement for John Carey to take it. — He is now with me — probably will be here a good deal this winter. &

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Rc: Oct 13

help me some.—

I should like something like a specimen — fruit & flower &c of Sida hispida in your next letter.—

In your first parcel I should like to have Wislizenus' Malvaceae, and Gramineae, & Loasaceae & anything else you have not determined and would like me to look at or study. I have good materials now — having a pretty good set of Coulter's Mexican plants, but mostly unlabelled. I will send all back, except where they will furnish a duplicate.

In the small parcel you gave me of his plants I find several Leguminosae & 2 Malvaceae. One of them I name as Torrey's Sphaeralcea incana. Nob. — (which seems too near S. miniata. (Fendl. no. 78) and several Leguminosae, which I am going to study now.—

In my next I will copy off my determinations up to Compositae or further.

I will look at Acalypha monoeca when I get at Euphorbiaceae. — But, as you will do that family, I shall have no need.

Secure good characters of the three [illegible]

I have two growing

Secure seed of the new Zinnia. I have it not.

I have not, or have not yet noticed, Gregg's Eustoma.

I had done considerable at altering of the Erythraeas in Fl. N. Amer. used to — ~~in that~~ I should rather like to study (after you) the Gentianeae.

As to a Monography of Asclepiadeae with figures,
I doubt whether Torrey will be likely to do it very soon—
Perhaps he may.— ~~Then~~ It would be best for you to
correspond with Torrey about it. One or the other of you
should do it,— ~~each~~ previously conferring as to names—
Very likely he would be glad to have you do it.

The Asclepiadeae of Oregon & California. Expl. Exped.
are too few for Torrey to put into your hands for study—
But if you will from me take that family
in the General Collection of Expl. Expedition, you
shall have it.— Of course the Cuscutineae, Cacteae
and if you like the Euphorbiaceae.—

Also the Polygonaceae.— These families, you will do
of course for the Fendl. & Lindh. Collections.—

You will get the characters all right, and in the
next ed. of Manual they shall be all to suit you—
Indeed, I wish you would prepare the Polygoneae &
Euphorbiaceae for me.

Send on the MS. of Cactaceae Fendlerianae.
I'll begin to print soon— Send on some few
remarks as to his route out and back.—

I shall send you proofs of the first sheets.

Thanks for the flowers & fruit of Guaiacum.—

I found the flowering specimen in Gregg's Plants sent
me by Torrey—among Mimoseae.— Yours truly

A Gray

Rec^d Octob 30th
Ans Nov 6th

Cambridge, ~~Novembr~~ Octob. 16, 1848.

Dear Doctor

I have yours postmarked 6. Oct.

Your "Drymaria nodosa" is, from the description same as the Pl. Lindh., but ~~only~~ the* stems are only glanduloso-puberulis. — In your next, send me a bit of your plant in return.

Corydalis. I can make nothing of your Corydalis
First, I do not think it a ♃. but ②.
montana. The root is just as in my cultivated specimens, when it flowers in the spring as a biennial, which it generally does. I find the little pruinose crenulations (they are not on all the Texas spec.) on the bracts slightly indicated on my N. New York specimens — which flowers just the same size & golden color, and seeds just the same. The only thing left to me is the minute pruinose-pubescence on the pods, — which is too variable in the specimens to rely on as a species. — I should much rather view the plant as a variety only. — & I think your C. micrantha = C. flavula, Raf. & the C. crystallina has been already in some sort published. — I wish you would leave them till the Texan coll. are published. Meanwhile I cite your name of C. montana.

29–31. Sisymbrium. — I will allow it is different from S. Sophia — I have diff^t. & finer cut specimens from Kankakee by Spalding. — I adopt your name as S. incisum, (I hate those compound "inciso-serratum".) — It stands between S. Sophia — (all w. 1-nerved valves or nearly) & S. tanacetifolium, L. — which is Hugueninia, Reich. — With it should rank S. canescens, notwithstanding the 2-seriate seeds — (the pod being broader). — Old Sisymbrium is a farrago. But how it is to break up into better genera is more than I can tell.

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I copy again my determinations of the plants from 1 to 17.

1. Clematis ligusticaefolia Nutt.
2. C. Pitcheri.
3. Atragene Ochotensis (N. A. alpina — as you please)
4. Anemone cylindrica
5. Pulsatilla patens.
6. Caltha leptosepala —
7. Ranunc. tridentatus, H. B. K.
8. R. affinis, R. Br.
9. Aquilegia Canadens. —
10. Delph. azureum
11
12. Actaea rubra —
13. Thalictrum Cornuti? (Please examine this)
14 Berberis aquifolium
15. B. Fendleri.
16. Argemone hispida — ? Mex. Does this run into A. grandiflora?
17 Corydalis aurea — var montana —

I shall send you some proofs soon —

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Octob. 17. 1848

Tuesday Morning.

Dear Doctor

Looking again by day light, I have nothing to add, but that the plant no. 98 x Fendler is a diff. species — not G. caespitosum (Fremontii). I will send that specimen back to you, I think safely, in this letter, — and you can add it to your note. — If you approve, I will in the enum. call this one G. Fendleri, Engelm. (I ask Torrey if this is his Fremontii, but I think not)

---

119. The spec. in your parcel is Phaseolus Helvolus, (not Galactia)

135. — As you please. P. gracile if you like. I had noticed one plant with aristate bracts projecting beyond the flower-buds, & the other as approaching gracile, which is probably not distinct. I see rather looser spike. & call it gracile, but throw doubt on the species.

140. Trifolium involucratum is the true one of Willd. "Calyx teeth longer than tube", not that of Torr. & Gray (Calif. which is diff.)

159. The pods not so inflated as in Phaca triflora (which is in Gregg's Coll. abundant), & my spec. has no flowers: from your notes, I agree to call it nov., you draw the pods so narrow, & my plant in this comes near to Kunth's figure. Shall I consider 158 as the same? — Send it me in a letter. In my spec. the legumes are not curved at all, but more as in your drawing of 158 only thicker & obtuse. (P. gracilenta).

180. "Acacia? humilis" — Though herbaceous (?)* I judge from the flowers you send that the plant is a Calliandra, Benth. (Cf. Lond. Journ. Bot. 3. p. 93) — & as I have a specimen of Mex. Bot. marked "C. humilis," n. sp.) I would suggest that you change the name to C. nana. I will insert it under that name, with your char. unless you say otherwise.

* From Monterey (Edwards.) I have an ally, which is a low shrub

156. Wislizenus is a new & remarkable Eysenhardtia
I propose we shall publish it together, — Tell me
the habitat. I have somehow lost the name you
gave me of the place where his plants were gathered.
The Texan Eysenhardtia seems to be only E. amorphoides—

I must look after the two Daleas also—
as I have now a good many species of that genus.—

---

I have received the money for Hooker's & "
Fielding's sets of Pl. Fendl. — & that Cleaveland
has not yet paid me. I owe Fendler therefore
now about $15. I daily expect to receive Cleaveland's
$27 — when I will remit.

Tuckerman has been away ever since the
package of Lichens came. — As soon as he gets
back, I trust he will take the parcels, and pay for
them.

In haste, truly Yours—

Asa Gray

MISSOURI GEORGE ENGELMANN PAPERS

Erysimum. — The young siliques of 35. are erect, — but no more so than in E. Arkansanum when young. — Nuttall has made too many — They are not distinguishable.

Among Geyer's plants from Torrey I have what appears to be an Audibertia. Do you know it? Is it in Wislizenus. — Send me any Nasturtia & Vesicariae you have of Wislizenus.

---

Now for Geranium. —
You misled me as to your G. pentagynum by putting that name to No. 90 in Fendler's Catalogue, which bothered me — for while, on the one hand it did not well accord with your character, on the other I could not separate it from 89, which is G. Fremontii. I still think No. 90 is not diff. from 89. — But with your new mss. and a specimen you gave me from Wislizenus' Coll. I now know your G. pentagynum as an erect plant, near G. maculatum. — and let me tell you the G. incisum, Nutt. has nothing to do with G. Fremontii (your Fendler) but is much more like your G. pentagynum.

No. 89, 90. — would take the name of Fremontii; but I feel confident, from the habitat and character, that this name must give way to G. caespitosum James. — imperfect as his description is.

88. — G. albiflorum Hook. non Ledeb. (I have known the diff. from the Ledebour plant — having it & his figure — Lindley has also pointed it out) = G. Richardsonii. Fisch & Meyer. —
But since G. maculatum has sometimes pure white flowers in Eastern States (fide J. Carey), and in Oregon Geyer says "Corolla white to crimson"; I am strongly inclined to doubt the

characters used to separate them, and to ~~distinguish~~ consider
it as a mere state of G. maculatum
However, you may be right, & I am willing to continue
an admitted name. –

211. Wisliz. I have from you – & recognize it as your
G. Hernandesii. – I dare say that of DeCandolle –
(but not of Schauer in Linnaea, 20. p. 731)
I have it not from Coulter's coll. –
Your G. gracile I have not. (Compare this with
Schauer's G. Hernandesii. supra cit. – You say "near G.
Mexicanum, Kunth?" Fortunately I have a cultivated specimen
of G. Mexicanum, from the Berlin Garden – & a plant, no.
763. of Mex. Coult. which agrees with it. The short erect
peduncles & still shorter erect pedicels & small flowers show
that it cannot be yours. – My specimen of Coult. is so small
I can spare little. I add, a fruit with pedicel – & a whole
2-flowered peduncle with 2 flowers (deflorate)

---

Now, as I can get along in Pl. Fendler.
for the Gerania pretty well. – And I
will print your note on the genus appended,
with such alterations as you choose to make
Let me suggest to you to alter the plan
of your primary sections (*, **) & take G.
Richardsonii away from G. Hernandesii which
it is very unlike, and put it with G. maculatum, which it is
very like, and wants to be particularly contrasted with. – The
color of the petals is not quite constant in a species, & so not good for
a primary section – and I see no marked difference between "seminibus
reticulato-foveolatis" & "sem. reticulato-rugulose" – If a specific
char. ~~very well~~ between them very well. – If you rearrange
the sections & names, – let me have them soon, with your matured
views, to print. –
N. B. In Mex. Coult. I have a plant, which is clearly G.
Schiedeanum Schlecht. peduncle very long, flower like G.
sanguineum – Lobes of the leaves many pinnatifid.

Recd Dec. 1st
Ans Dec 21st

Boston
~~Cambridge~~ November. 18th. 1848.

My Dear Doctor.

I have to-day yours of the 7th inst, and previously those of the 15 & 28th Oct. — to which I give a hurried reply to the important points. —

---

1. Euphorbia. I say publish your Monograph. Send on the MSS. to me — If you write it rather fully, I will print it as an independent memoir in Mem. Amer. Acad. — If rather brief, like a conspectus I will print it in as a long note under the genus in Pl. Fendl. — It will be scarcely longer than a note of mine under Malvaceae. Torrey will send you bits or specimens of your desiderata if you ask him; so far as he has them: Euphorbia [illegible] Mead gets in Illinois — I think I have it from N. Carol.

---

Boott wrote me that he would get the cash in Hooker or Heward's hands for Fendler — I shall get it next steamer, — I trust. Harvey of Dublin, has offered to take the set addressed to Oakes — still in my hands (I having recovered it back), & I shall send it soon & draw on him for the amount.

I will soon give you a farther list of my ~~dup~~ determinations of Pl. Fendl. etc. — Also proofs — I have 10 pages in type — I am hard at work at Compositae and shall stop at the end of those; & give a part 2 afterwards — I write away from home (snatching a moment) & cannot send a list now. —

Nov. 18 – '48

– Well. – Wright has come North – to act. curator – a while for me – Says he rather go to St. Fe – & I ~~thought~~ we might send him in the Spring – when lo! – at length – after refusing when all was in good shape for a support – now Fendler says he will go, – eh !

Very well – He is a capital collector – & I think it the best thing he can do. – unless, indeed we could get him attached to the Commission that is going to run the boundary line through between the U.S. & Mexico – to join them in New Mexico, & go through to California – Maj. Graham is getting the instruments ready for this – I will enquire & see if I can do anything at Washington, – Also for Govt. clerkship, as soon as a Government is made for New Mexico. –

I have spoken to Mr. Lowell to see if he will still do as he said – $200 pr. year was it not? I merely sounded him; but it seemed all right; so I am sure that he will still be glad to keep his promise. I will, soon as you are ready, get his promise renewed – & have the first ~~cash~~ year's cash ready for you by Feby. –

I have written to Philada for ~~Arceuthobium~~ Nuttall's ~~instal~~ $100 – If I get a favorable reply I shall send you the draft right away. —

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GEORGE ENGELMANN PAPER

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(3)

Never fear I shall not like your criticisms
or be offended— The more, the better.— I think we
are needful to each other, & act as good checks on
each other.— (You incline to *split* a little too
much— I am apt to *lump*, especially where a genus
is a good deal confused already.

I am going to compare your Drymaria Coulteri with
D. nodosa, on Monday.— But, in your drawing I see
no diff. which might not be attributed to the greater
vigor of yours as a cultivated plant— fuller petals, &c—
But the two look so precisely alike
I will see—
outside.

Calliandra herbacea— good.

I know but one Eysenhardtia (I have not Wisl. 2.
~~the~~ "spinose" radius is in Hartweg's Coulter's
no. 133) but — But I have never
plat.— real E. amorphoides, are dont. Please send in letter a
seen 4-ovules (only 2)
bit of Wisl. no. 133.—

As to Gordon's Raton Mt. Plants, if there are
not very many, send me a set for me (except
Common things, also in U.S.— Mimosa borealis I want flowers
much— Send in letter.— & the Vesicaria which
has troubled me—

P.S. Perhaps— if you will send me a full set for
Lowell first (& a few you know I want) I can
point out those I should be glad to take myself—
I think that is best. But send soon.—

I had found, meanwhile, your Mem. of localities Wislizenus &c—

Some farther obs— will probably be needed on your 3 letters, when I look them over Monday with my MSS— before me.—

I have some nice genera of Compositae—

This is my birth-day (38th!) I have worked hard all day — & come in to see my wife this evening— She sleeps by my side while I am writing this long letter.— My hand is much fatigued.— Adieu, Yours truly

A. Gray

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Arceuthobium 282 (312) has male flowers—young.
I suppose Fendler is wrong there about fruit
I think it may be the male of 283 (313) which
is A. oxycedri.

No more of Hooker on Geyer's Pl. after Compositae.

I have true Polanisia uniglandulosa from Mexico—
like P. trachysperma—but much larger & vastly
longer style & stamens.—

Now for yours of Nov. 5—

Phaca triflora came originally from Mexico
(Tornador, Graff)

156. Wisl.—is a Dalea (D. leucostachys.—

I will look again at the Thalictrum Fendleri.—I thought
the fruit was too broad; but seemed too like western
(Arkansas & Tex.) forms of T. cornuti, & hated to add
n. sp. to such a troublesome genus.— I will insert
into the proof on Monday.

Argemone hispida— I had fruit of from Fremont's
coll. like yours in litt. A. grandiflora, Lindl. is figd. in Bot. Reg.

Cruciferae— for "Audibertia" in my letter
read Au~~dibertia~~brietia. Cruc. 1. looks like Malcomia
or Matthiola.—

To-day, only I have received specimen of Geranium
Fremontii from Torr., & can now compare.—Will
do so.— (James is not much of a botanist. It is only
the size of flower of G. caespitosum he compares with G. Richardsonianum.)

86. Nisl. I had already named Dalea scoparia.

— You shall have the free use of any Pines I have, — & I will send when you are ready for them — I must remember to send you the copy of Manual you wanted. I forgot.

I have no Cactæ, except what you have given me. — I fear, few pine-cones,

— I wait for the remarks on Fendler's route — hist., as I have only a page & ½ — 4to. for them.

Thanks for Sida hispida := Malvastrum angustum.

The "Malva ? 10 carpels, radicle ~~superior~~ inferior." from Llano" Lindh. I have had from Wright for a year; also from Torrey coll. by some officer in S. Texas. — have noticed the very dilated calyx, like a Physalis, & the curious fleshy carpels. — But it is a Sida & Radicle ~~inferior~~ superior! therefore I do not describe it in Pl. Fendl. — But ~~keep~~ the Sidas for a revision in Pl. Lindh. hereafter. So I do not now study your S. heterocarpa — (which I suspect is one of Cavanilles. — I send you a drawing of the carpel & seed of the Llano plant — that you may see the rad. superior! Send back in your next.

Rec^d Dec 12^th
Ans Dec 21^st

Engelm

Wislizenus no. 530. St. Fe. — Specimen which you note I am to keep. "Artemisia" = Linosyris graveolens. = (341) Pl. Fendl.

---

Now I have Fremont's original specimen of Geranium Fremontii before me; also 2 small ones (fragments) collected in the Raton Mts. by ~~Emory~~ Abert — which show that the G. Fremontii (Hb. Torr.) = is G. Fendleri E. — no + 90. — Pl. Fendl. — and I say — with you, "rather too near G. pentagynum", but I suppose diff^t. in the mode of growth & the foliage. —

The specimens all tend to have pedicellis fructiferis declinatis (not "erectis") & so I had drawn the character from the specimen returned to you in letter. —

No. 89. I still strongly think must be G. caespitosum of James. —

---

13. I allow quite distinct. Thalictrum Fendleri. Engelm.

25. Nov. 1848.

Dear E. I enclose draft for $100 on Mr. Durand (who has received the amt. of Nuttall's draft, and holds it subject to this order. — (Yours very truly)

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Recd. Dec 15th
Ans. Dec 21st

Cambridge. 30 Nov. 1848.
[Printing office

Dear E.

I received this morning your immense letter — of Nov. 15 — etc — hurried down to the printing office to see if I could stop sign. 2. of Pl. Fendl. from going to press — I had kept back sign. 1. — leaving 2 pages only blank for title & prefatory remarks — which what you send will more than fill up. if the nos. are written out. — Too late to alter now. — Why did you not send it sooner. I must shorten it vastly. —

I shall reply to the points in your letter in a day or so — & immediately send you the Proceedings ~~Acad~~ Acad Philad. Nuttall on Gambell's Plants — where you will find he is before you in dividing Viscum —
I looked at it; but could make little of his characters. — That being anticipated — wait for better materials before the genus can be satisfactorily worked up. — I can send you

Arceuth. Oxycedri. — Bentham pronounces the Calif. & Mexican the same as Bilastes. — He is a good judge. —

MISSOURI BOTANICAL GA
GEORGE ENGELMANN PAP

But the principal thing now is — that I sent you a draft for Nuttall's $100. — which I am concerned about now that Fendler is so restless & changeable. — Tell him botanists (the only ones we can rely on to purchase) are well stocked with Californian plants. — that I will have nothing to do with his going there as a collector. — If he wants to go as an adventurer merely — he must go on his own hook. — But if he can get attached to the ~~pa~~ Government party for running the line between Mexico & U. S. — very well — he can collect ~~in the first region &~~ on the route & then stay in Calif. if he pleases. — The place to collect now is about Taos — & to get up Spanish Peak. Long's Peak &c. If he will go & fix himself at the Mormon's town on Salt Lake — & collect in the plains & mountains seed. — that will be well. — We will have Lowell's cash for that.

I have a note from Heward to Boott. He says Nott has not got back to Paris yet, so his coll. of Fendl. Plants is not delivered. the others were for Brit. Mus. & for Mr. Taylor — & delivered, — but the proceeds not received yet. & of the 6 sets unaddressed — no call yet. — Not encouraging, truly. But I shall write by first steamer that he must collect the cash, immediately — write to Bennett of Brit. Mus. also. — Send Dr. Lemann to Heward for the largest of the 6. — & send Oakes set to Harvey who will remit at once thro' Boott.

The more need that I should publish at once the Pl. Fendl. (as far as to Compositæ inclusive) to call attention to them. — Then they will go, I trust. I shall have 150 copies & distribute largely abroad.

I have Boott's determination of the Carices (in Hooker's set) viz. —

GARDEN PAPERS

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878 C. Douglasii Boott.
881 C. Hoodii "
882 C. festiva, Dewey
884 C. muricata
885 C. tenella Schk.
887 C. Jamesii Torr.
889. C. Rossii, Boott.

He greatly wants 887. C. Jamesii –
Can you not send a specimen to me for him?

Yours ever – in great haste

A Gray

Recd Dec 20th
ans Dec 21st
& Jan 5th, 49

Cambridge Dec. 4, 1848.

My Dear Doctor

I sent you a hasty despatch on Friday..—

Now for another.— You have arranged your gen. characters neatly for the Visci.— But, by the extract I send enclosed from Nuttall, it is plain that his name—Phoradendron, will take preference for your Spiciviscum.

Meanwhile, as I half suspect that the leafless Amer. species referred to Viscum in Fl. have never had their anthers examined, and ~~will~~ may as likely as not prove to agree with Arceuthobium,

Phoradendron juniperinum

I had put 281. as Arceuthobium; Sphaerocarpum, N. ms.

282, as A. Oxycedri? (stam.)? — gracile

283 as A. Oxycedri.— which it is of Hook. & Ar. — robustius

I doubt not— tho. rather shorter

Hooker, as to the Oregon pl. & Benth. as to a Mexican specimen say they cannot distinguish from Bieberstein's of Europe & Asia.— I agree with you that 283 is too likely to be Nuttall's americanum.—

I go to pick out some specimens to enclose for you— and a sketch of Hooker's figure as to the essential parts.— I do not myself feel prepared to take ground about these, with present materials.— You can, if you please.— Your next letter may reach me before I get Loranthaceae in press.— In the Flora, I know Nuttall's plant, Arceuth. americanum, as you see in the nothing of, as to any specimens.

On looking at my herb., I find no European A. Oxycedri, except a poor piece (mas.) from Fiume.— which shows nothing. I send a bit of it..

Hooker says "Drummond's & Douglas's plants have been carefully compared with European ones found growing on Juniperus oxycedrus, some from the S. of France, others from Caucasus, & I must confess that I can find no specific difference in them whatever. In general, but not always, those from the old world are greener or blacker when dry, and the American more yellow."

And Bentham in Voy. Sulph. speaking of the California plant, says—

"Besides the stations already known for this parasite in the coniferae of N. W. America, S. Europe & S. Russia, it has been found by Linden on pine-trees on the peak of Orizaba in Mexico; and on the closest examination of the dried specimens I am unable to detect any difference between the European & the Mexican specimens. Botanists do not however, agree about the color of the fruits. In California they were found to be nearly black, with a yellow top!"

The plant you send enclosed Fendler forgotten = Eurotia

I think Fendler's true plan is to go back to Santa Fe and explore New Mexico, especially the Mts. — He will try to get him some clerkship. — But if, instead, he chooses to come here, and will engage to stay two years, if we like each other, I can give him a small salary, I fear not more than $250 — to act as my curator & to assist in the garden about many things — with a chance to attend scientific lectures. — But he can do better other ways. — Mr. Wright is here, now. — He prefers exploring to any thing else; — will go to Santa Fe, or wherever we choose to send him. — he is used to roughing it, & has long been in the woods & prairies; — As he is used to lower Texas, we are going to try to get him attached to the Southern boundary survey party, — to go west as far as he can & then get into the Sierra Madre; Chihuahua &c. — or to strike up north & make head quarters at Great Salt Lake. — I think the latter. — He can explore the plains & the Wasatch Mts. Fendler's own set, the Philad^a. Acad. should buy.

I'll compare Eysenhardtia when we come to Texan Pl.

If you get a chance send Pulsatilla patens with other things by water via N. Orl. — or if not put in ground to send in spring, after danger of freezing is past.

As the rest of Pl. Fendl. cannot be published just yet, perhaps I will print off your Asclep. in Sill. Jour: or in Proceed. Acad.

MISSO
GEOR

I'll get a chance to look again at your 3 Eysenhardtias;

But when I had all before me, I could find no spec. diff. — I will look again with the aid of your notes & drawings. — But not time now. — must leave — with other things — till it comes up naturally with Texan collections. —

Your Eisenmannia — (which I at first mistook for an Eysenhardtia — I soon after made a true Dalea of. I think there is no doubt of it. I called it Dalea leucostachys. & it has gone to the printer.

The sheet of copy that contains the Mimoseae is still in my hand — so I can add the flowers of Mimosa borealis — & introduce your Calliandra chamaedrys. —

It is late. So, good night —

Yours truly

A. Gray

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